(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

542869

(43) International Publication Date
5 August 2004 (05.08.2004)

PCT

(10) International Publication Number
WO 2004/066273 A1

(51) International Patent Classification[7]: G10L 21/02, 11/02, 15/24

(21) International Application Number: PCT/EP2004/000104

(22) International Filing Date: 9 January 2004 (09.01.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03001637.2 24 January 2003 (24.01.2003) EP
03022561.9 2 October 2003 (02.10.2003) EP

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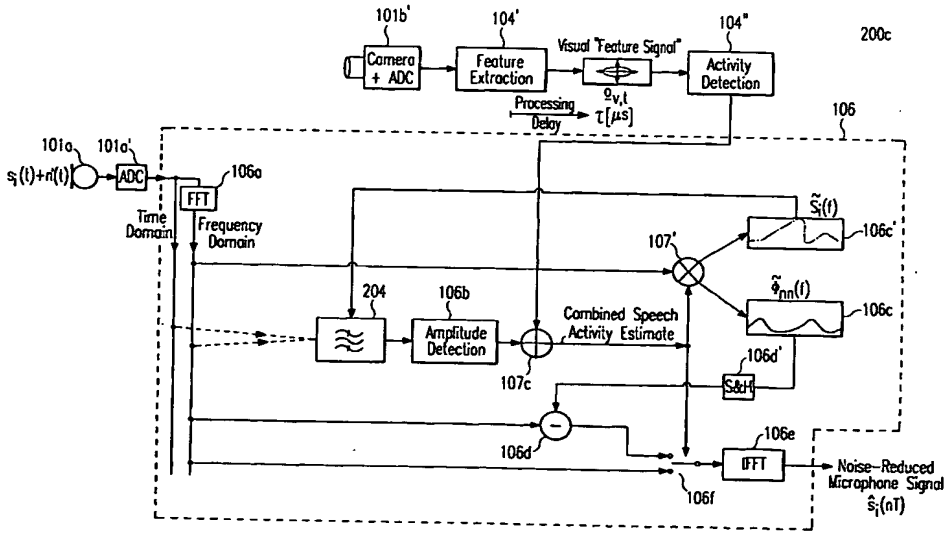
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

[Continued on next page]

(54) Title: NOISE REDUCTION AND AUDIO-VISUAL SPEECH ACTIVITY DETECTION



(57) Abstract: The present invention generally relates to the field of noise reduction systems which are equipped with an audio-visual user interface, in particular to an audio-visual speech activity recognition system (200b/c) of a video-enabled telecommunication device which runs a real-time lip tracking application that can advantageously be used for a near-speaker detection algorithm in an environment where a speaker's voice is interfered by a statistically distributed background noise ($n'(t)$) including both environmental noise ($n(t)$) and surrounding persons' voices.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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